WO 2005/040904 PCT/KR2004/002740

WHAT IS CLAIMED IS:

1. A liquid crystal display comprising:

a first insulating substrate;

5

10

15

first and second gate lines formed on the first insulating substrate;

a pixel electrode formed on the first insulating substrate;

a first MIM diode formed on the first insulating substrate connecting the first gate line and the pixel electrode;

a second MIM diode formed on the first insulating substrate connecting the second gate line and the pixel electrode:

a second insulating substrate facing the first insulating substrate;

a data electrode line formed on the second insulating substrate and intersecting the first and second gate lines, and

wherein the data electrode line includes protrusions protruding toward right and left sides by turns to overlap a predetermined number of pixel electrodes of the right and left sides by turns.

- 2. The liquid crystal display of claim 1, further comprising a black matrix, a color filter, and a overcoating layer disposed between the second insulating substrate and the data electrode line.
- 3. The liquid crystal display of claim 1, wherein when a column direction represents the length direction of the data electrode line, the

WO 2005/040904 PCT/KR2004/002740

period of the right and left protrusions is the column direction length of two pixels.

4. The liquid crystal display of claim 2, wherein a main element of the black matrix is an organic material.

5

10

15

20

5. The liquid crystal display of claim 1, wherein the first MIM diode includes a first input electrode connected to the first gate line, a first contact portion connected to the pixel electrode, a first channel insulating layer formed on the first input electrode and the first contact portion, and a first floating electrode formed on the first channel insulating layer and intersecting the first input electrode and the first contact portion; and

the second MIM diode includes a second input electrode connected to the second gate line, a second contact portion connected to the pixel electrode, a second channel insulating layer formed on the second input electrode and the second contact portion, and a second floating electrode formed on the second channel insulating layer and intersecting the second input electrode and the second contact portion.

- 6. The liquid crystal display of claim 1, wherein two adjacent data electrode lines are applied with signal voltages having opposite polarities to each other.
- 7. The liquid crystal display of claim 1, wherein the first gate line and the pixel electrode are made of indium tin oxide (ITO) or indium zinc

WO 2005/040904 PCT/KR2004/002740

oxide (IZO).